

Ch 9 Test Friday
 Quiz in Ch 10
 next wk

9.5 Dilation

Dilation is a transformation that changes size

Center point

scale factor-- r

$|r| > 1$ enlargement

$|r| < 1$ reduction

$|r| = 1$ congruence transformation

Since a dilation is not an isometry, it is called a similarity transformation.

gsp

Dilate some segments and see what happens to the length.

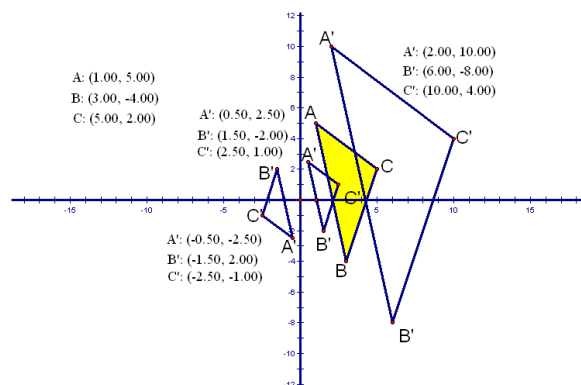
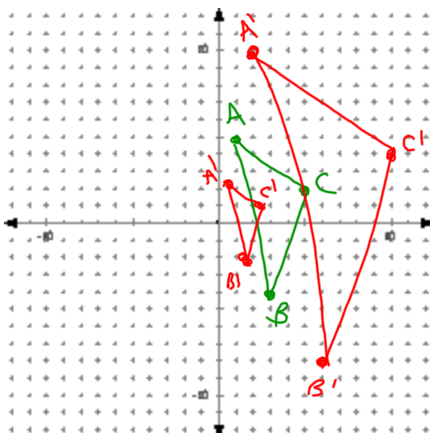
$AB = 12$	$r = .5$	$A'B' = 6$
$AB = 12$	$r = 3$	$A'B' = 36$
$AB = 12$	$r = -2$	$A'B' = 24$
$A'B' = 20$	$r = 5$	$AB = 4$
$A'B' = 18$	$r = .75$	$AB = 24$

A(1, 5)
B(3, 4)
C(5, 2)

$r = 2$
A'(2, 10)
B'(6, 8)
C'(10, 4)

$r = .5$
A'(.5, 2.5)
B'(1.5, 2)
C'(2.5, 1)

$r = -.5$



HW
p494-495
20-28, 30-35

Attachments

9_5shape_dilate.gsp